

REMARKS

This application has been reviewed in light of the Final Office Action dated May 23, 2008. Claims 1-7 are now pending in the application. The Examiner's reconsideration of the rejection in view of the following remarks is respectfully requested.

By the Office Action, the Examiner has requested that a new title be submitted, asserting that the title of the invention is not descriptive. The Applicant respectfully disagrees with the Examiner's assertions. The claims are clearly directed to an active matrix liquid crystal display device. However, for the sole purpose of expediting prosecution of the application, the Applicant has amended the title in a way believed to comply with the Examiner's request.

By the Office Action, claims 1-5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,667,783 to Bae et al. (hereinafter 'Bae') in view of U.S. Patent No. 6,667,783 to Greene et al. (hereinafter 'Greene').

Claim 1 recites, inter alia, an "active matrix liquid crystal display device comprising ... sets of selection and data address conductors connected to the picture elements, and a set of connection lines for supplying selection signals to the set of selection address conductors, ... wherein each picture element includes a storage capacitor connected between the picture element electrode and a capacitor line shared by the picture elements in the same row, and wherein the selection address conductor associated with one row of picture elements is coupled to the capacitor line associated with a different row of picture elements so that each connection line is connected to a respective selection address conductor for one row of picture elements and its coupled capacitor line for another row of picture elements."

As discussed at length in the previous response submitted to the PTO on February 12, 2008, Bae and/or Greene fail to disclose or render obvious the feature of "a storage capacitor connected

between the picture element electrode and a capacitor line shared by the picture elements in the same row. . . wherein the selection address conductor associated with one row of picture elements is coupled to the capacitor line associated with a different row of picture elements.” Greene does not disclose or render obvious use of capacitor lines shared by picture elements in the same row. Thus, Greene fails to disclose or render obvious the feature of a storage capacitor connected between a picture element electrode and a storage capacitor line shared by pixel elements in the same row.

Furthermore, while Bae discloses a pixel configuration including a connection between a line of storage capacitors and a gate line of a different row, the pixel configuration does not include a storage capacitor connected between a picture element electrode and a storage capacitor line shared by pixel elements in the same row. FIG. 23 of Bae clearly illustrates that the pixel electrode (C_{LC} terminal) (82) is directly connected to the line of storage capacitors (see, e.g., FIG. 23; column 8, lines 4-11 (describing the pixel electrode’s relationship with the line of storage capacitors)). A storage capacitor is not situated between a picture element electrode and a storage capacitor line, as recited in claim 1.

In support of the rejection, the Examiner has stated that “[w]hen one examines each pixel one at a time [in the Bae configuration], every pixel can be defined as having a storage capacitor connected between the picture element electrode and a part of the storage capacitor line” (Office Action dated May 23, 2008, p. 10, paragraph 2). However, the Applicant respectfully submits that the claims are not directed to a pixel, but to an array of picture elements. And in the claimed array of picture elements, “each picture element includes a storage capacitor connected between the picture element electrode and a capacitor line shared by the picture elements in the same row.” Claim 1 explicitly distinguishes between storage capacitors corresponding to picture elements and a storage capacitor line shared by the picture elements in the same row. The Examiner’s attempt to limit the

review of Bae to individual pixels requires consideration of storage capacitors as being in a line of capacitors when examining one pixel and as being outside the line of capacitors (i.e., between the line and an electrode) when examining another pixel. Bae simply does not disclose or remotely suggest a capacitor line that is distinguished from storage capacitors connected between the capacitor line and a picture element electrode, as recited in claim 1. Accordingly, the Applicant respectfully requests that the rejection be withdrawn and that the pending claims be allowed.

By the Office Action, claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Bae in view of Greene in further view of U.S. Patent No. 5,995,177 to Fujikawa et al. (hereinafter 'Fujikawa').

Claim 6 depends from claim 1 and includes all features recited in claim 1. Thus, claim 6 includes, inter alia, an "active matrix liquid crystal display device comprising ... sets of selection and data address conductors connected to the picture elements, and a set of connection lines for supplying selection signals to the set of selection address conductors, ... wherein each picture element includes a storage capacitor connected between the picture element electrode and a capacitor line shared by the picture elements in the same row, and wherein the selection address conductor associated with one row of picture elements is coupled to the capacitor line associated with a different row of picture elements so that each connection line is connected to a respective selection address conductor for one row of picture elements and its coupled capacitor line for another row of picture elements."

As discussed above Bae and Greene, taken singly or in combination, fail to disclose or render obvious, the features of "a storage capacitor connected between the picture element electrode and a capacitor line shared by the picture elements in the same row. . . wherein the selection address conductor associated with one row of picture elements is coupled to the capacitor line associated

with a different row of picture elements.” In addition, as discussed in the previous response submitted to the PTO on February 12, 2008, Fujikawa fails to cure the deficiencies of Bae. While Fujikawa describes an LCD matrix having a storage capacitor connected between pixel element and a capacitor line shared by pixel elements within a row (see, e.g., Fujikawa, FIG. 3), combination by one of ordinary skill in the art with either Green or Bae would not result in the features included in claim 6.

As stated above, Greene does not even mention use of capacitor lines shared by picture elements in the same row. Moreover, Bae specifically teaches against employing the capacitor line disclosed in Fujikawa because of the line’s tendency to decrease a display device’s aperture ratio (compare Fujikawa, FIG. 3 with Bae, FIG. 1, element ‘SL’ and Bae, column 2, lines 38-41). Thus, combination of Bae and Fujikawa by one of ordinary skill in the art would not result in “a storage capacitor connected between the picture element electrode and a capacitor line shared by the picture elements in the same row. . . wherein the selection address conductor associated with one row of picture elements is coupled to the capacitor line associated with a different row of picture elements,” as included in claim 6. Accordingly, claim 6 is believed to be patentable and in condition for allowance.

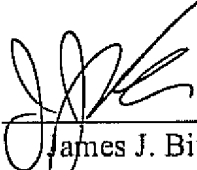
In support of the rejection of claim 6, the Examiner has stated that “the fact that Bae may teach away from the invention does not change the fact that in teaching away, Bae still teaches the invention, and therefore can be used in a rejection” (see, e.g., Office Action Dated May 23, 2008, p. 15, paragraph 4). The Applicant respectfully requests clarification of the Examiner’s argument.

In view of the foregoing amendments and remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration of the case is respectfully requested.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicant's representatives Deposit Account No. 14-1270.

Respectfully submitted,

Dated: 2nd 14 - 08

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